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Gut feelings: depression as an embodied and affective phenomenon in Houellebecq's *Serotonin*

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ABSTRACT

Current debates about the possible causes of depression reinforce the age-old body–mind dualism: while some claim that depression is caused by psychological or societal stress, others underline that it results from a shortage of the neurotransmitter serotonin in the central nervous system. This paper shows that Michel Houellebecq's latest novel *Serotonin* can be read as an account of depression that goes beyond this body–mind dualism. Moreover, we will argue that his way of narrating invites us to reconsider the restorative power of narrative in 'pathography,' a genre that is a primary focus within medical humanities. The first section of the paper discusses, while drawing on Wilson's work on new materialism, that although the title of the novel *Serotonin* may suggest that Houellebecq takes sides with those who believe that depression is a brain disease, the protagonist of the novel suffers mainly from his gut feelings, which affects his entire embodied existence. Against the background of Merleau-Ponty's philosophy, the second section specifies this existential disruption in terms of an embodied 'I cannot.' In the third section, we make clear how Houellebecq's way of narrating—plotless and episodic—reinforces these embodied feelings of incapacity. The final section, then, traces how Houellebecq, by means of his style of writing and his choice of themes, succeeds in transferring gut feelings onto the reader. If illness narratives aim at sharing experiences of illness, the 'narrative' of depression, so we argue, had better take the form of an anti-narrative or a chaos story. Indeed, Houellebecq's anti-narrative succeeds in passing on to the reader the experience of a debilitating gut feeling, and a gradual loss of grip that manifests itself as a temporal and spatial disorientation.

INTRODUCTION

Depression is an urgent public health problem of our time. According to the WHO, 300 million people suffer from it at one point in their lives. Yet, when it comes to knowledge and insight into its nature and causes, much remains unclear. Depression has a heterogeneous clinical picture, meaning that the process and the response to treatment differ from patient to patient. Indeed, its psychotherapeutic and biological methods of treatment, as well as its aetiology and pathogenesis, are subject to ongoing debate. Whereas some claim that depression is caused by psychological or societal stress, others underline that it results from a shortage of the neurotransmitter serotonin in the central nervous system. These debates reinforce an age-old mind–body dualism, for indeed, they suggest that the cause of the depression should be sought either in some bodily (neurological) defect or in ill-working psychological capacities.

In this paper, we will show that Michel Houellebecq's latest novel *Serotonin* can be read as an account of depression that goes beyond this body–mind dualism.[1] Informed by theories from new materialism and phenomenology, we will read depression in *Serotonin* as an embodied and affective phenomenon. Moreover, we will entertain the possibility that Houellebecq's style of writing depression, as well as his thematic choice, evokes fellow feelings of disorientation and dislocation in the reader. At first sight, Houellebecq's novel can therefore be seen as a fictional illness narrative, which gives voice to a person's lived experiences from a first person's perspective.

However, when we look closely at the presentation of the depressive experiences of its protagonists, we see characteristics that problematise a straightforward categorisation as fictional illness narrative. Houellebecq's particular mode of pathography seems to resist 'narrative,' when we take this to refer to accounts that take the form of a story, that order events in time (with a beginning, middle and end structure), and involve changes over time that affect a subject or a protagonist. This manner of presentation has received a lot of attention in medical humanities research. In looking for causal relations and explanations and thus answering the question 'why me?', narrative can indeed help the subject of illness trace a single self throughout a series of discontinuous and often disruptive events. In a way, it normalises and re-familiarises the depressive episode as an experience, and while illuminating medical language, it can facilitate a better understanding of one's experience.[2] As Hilary Clark writes, "narratives stitch up the wounds resulting from traumatic events or simply unexpected change."[3] The form of the story helps to retroactively make sense of a depressive episode by placing it back in a diachronic continuity, thus giving the narrative self a renewed sense of coherence.

This may give the impression that narrative is the only viable form in which to communicate such experiences. Yet, there are obvious challenges to narrating depression: depressive experiences are hard to describe adequately due to cognitive impediments and distortions. They are characterised by decidedly anti-narrative, or narrative-resistant, elements. In *Reading for the Plot*, narratologist Peter Brooks argued that plot is the 'design' of any narrative: it consists of intentional structures, of every element that pushes the story forward and steers it towards a conclusion.[4] If the motor of narrative " is desire, totalizing, building ever-larger units of

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meaning, the ultimate determinants of meaning lie *at the end*, and narrative desire is ultimately, inexorably, desire *for* the end."[5] In order for a story to commence, an agent must want something. Yet, as Arthur Frank has written, "[illness] often precipitates a condition of lacking desire."[6] And more in particular, depression is often characterised by such a lack of desire (emblematised by Melville's Bartleby's characteristic 'I'd prefer not to'). It is further marked by the impotence to act, while actions are generally considered to be the building blocks of the plot.

Houellebecq's 'narration' of depression, so we claim, can be interpreted as an account of this lack of desire which results in a corresponding lack of plot. Houellebecq is arguably the most notorious contemporary European writer of depression: all his protagonists suffer from depression in some form or other, or to be more precise: they are depressed, white males. His oeuvre has been described as chronicling 'the last gasps of the once dominant white male.'[7] Depression in his literary works has predominantly been interpreted by critics as critique of a sick social and political climate in the West, which is losing its possibilities for the future because of undermining neoliberal forces in its societies, leading to a crisis of imagination.[8] Many have remarked on the connection his texts forge between sexual and political impotence, and the connection between the sick male body and the declining health of the nation and of French society.[9] To the extent that there is no viable alternative to neoliberal capitalism, the Western world is at the end of its history, or, in the words of the narrator of Houellebecq's *The Possibility of an Island* (2005), "The future was empty."[10]

Even though this societal critique is an important thread throughout *Serotonin*, we have chosen another angle: Houellebecq's writing allows for an alternative view on depression. In *Serotonin*, we argue, depression entails the breakdown of our embodied existence, manifesting itself in feelings of discouragement and disgust (*être écoeuré*), and the gradual elimination of bodily possibilities for engagement with the environment. While using elements of Frank's 'chaos narrative,'[11] marked by an open-ended structure and an absence of recovery, and episodic or paratactic, anti-cathartic temporal ordering, Houellebecq amplifies embodied feelings of disgust, temporal dislocation and non-catharsis in the protagonist and the reader alike. Analysing this literary work from a framework of phenomenological philosophy, we aim for two contributions to research in the medical humanities: (1) to add to an existing body of research into alternative pathographies beyond the narrative paradigm;[12] (2) to address, nuance and complicate the prevalent understanding of depression as a brain or mood disorder, by showing how it involves the whole body and mind, as a relational phenomenon that affects the subject as an embodied being.

FROM BRAIN TO GUT

Serotonin tells the story of the depressed Florent-Claude Labrouste, a 46-year-old agricultural engineer who ends a loveless relationship with the 20-years younger, thoroughly spoilt, Japanese woman Yuzu. After a joyless holiday in Spain, he decides he wants to disappear. He has had enough of Yuzu and his job at the Ministry of Agriculture. Inspired by a TV documentary called *Voluntarily Missing*, he deletes his internet presence, abandons his job and leaves his apartment without telling anyone where to or why. With the money from his parents' inheritance, he can afford to stop working and to take up residence in a Parisian hotel.

The story meanders between this present and Florent-Claude's memories. As he sinks further and further into apathy and impotence, he considers himself to be dying, and decides, as a kind of farewell ritual, that he wants to see people who were important to him. As such, he embarks on a road trip he also calls "a mini farewell ceremony for my libido" (p. 163). He visits his old student friend Aymeric, a dairy farmer of noble descent, who is in a much worse state than Florent-Claude because his wife and children have left him and his farm is deteriorating and going bankrupt. During a peasant revolt against the imposed milk quota, Aymeric commits suicide and becomes a hero in the eyes of the local population. With respect to these events in his life, Florent-Claude is only a passive observer, a bystander. In the same way, he only watches, from a distance, how his great lost love, Camille, leads a life of her own as a veterinarian. He loses himself in elaborate fantasies of shooting her 4-year-old son, but does not follow through, and returns to his Parisian hotel instead. As soon as the hotel adopts a strictly non-smoking policy, he feels compelled to move to an anonymous residential tower. Here he spends his days smoking and watching television, supported by the use of the antidepressant Captorix. Finding himself "essentially deprived of reasons to live and of reasons to die" (p. 74), he is "dying of sorrow" (p. 280).

With the title of the book, *Serotonin*, Houellebecq seems to directly situate the story of the depressed Florent-Claude within the neurobiological explanation model of depression, which is dominant today. Serotonin is a neurotransmitter, a substance responsible for enabling communication between nerve cells.[13] Around the 1950s, it was discovered, by accident, that drugs that supposedly enhance the level of serotonin caused considerable mood improvement in people suffering from depression. The first generation of these drugs still caused major side effects. In the late 1980s, the second generation—the so-called selective serotonin reuptake inhibitors (SSRIs) such as Prozac and serotonin-norepinephrine reuptake inhibitors (SNRIs), such as Effexor—was launched on the health market. These promised major mood enhancement and fewer side effects.[14] Since that time, consumption of antidepressants has increased enormously, worldwide. Nikolas Rose estimates that in between 1990 and 2000, the prescription of antidepressants in the USA has increased by 1300 per cent.[15] In pace with that consumption, depression is increasingly considered as a kind of brain disorder. It has become rather common to say that depression is caused by a shortage of serotonin, or at least by some chemical imbalance in the brain.[16]

Houellebecq seems to follow this kind of reasoning when he center-stages Florent-Claude's consumption of the (fictional) antidepressant Captorix, which is described as follows:

> It is a small white, oval, scored tablet. It doesn't create or transform; it interprets. It renders fleeting what was definitive; it renders contingent what was ineluctable. It supplies a new interpretation of life – less rich, less artificial, and marked by a certain rigidity. It provides no form of happiness, or even of real relief; its action is of a different kind: by transforming life into a sequence of formalities it allows you to fool yourself. On this basis, it helps people to live, or at least to not die – for a certain period of time. (p. 308)

In the story world of *Serotonin*, use of this medicine seems common enough. Doctor Azote does not even inquire into Florent-Claude's circumstances and life before asserting that "[w]hat's you need to do is to keep your serotonin at the correct level – right now it's okay, you're fine – but lowering the cortisol, and maybe increasing dopamine and endorphins, that would be ideal" (p. 281). The patient is not treated as an individual so much as a puzzle of hormone management. He is invited to understand himself in terms of a 'neurochemical self'.[17]

Since Houellebecq situates the story in a zone between our present time and a point in the near future—as he often does in his novels—this enables him to introduce some futuristic elements. Captorix, he writes in the beginning of the novel, is a new kind of antidepressants, which is—in the temporal frame of the novel—recently released. At first sight, however, the fictional Captorix is very similar to common SSRIs and SNRIs. Like the existing antidepressants, it has libido loss, loss of potency and nausea as common side effects. Also, while mentioning that the drug may work or not without anyone exactly knowing why they work or not, Houellebecq underlines the increasingly accepted view that doctors and scientist alike do not know what the operating mechanism of SSRIs and SNRI's consists of.[18] As the doctor character says in *Serotonin*: "if they had to wait to have absolute scientific certainty they'd never have put out a single drug on the market, you understand all that?" (p. 274). Also, comparable with existing antidepressants, Captorix does not really cure, but only softens the sharp edges of the depressive state.

Still, Houellebecq's fictional description of both serotonin and the new drug offers a different perspective on depression. His narrator describes serotonin as a hormone: "serotonin is a hormone related to self-esteem, to the recognition obtained within a group… in addition, it was mainly manufactured in the intestines" (p. 94). In reality, however, serotonin is not a hormone but a neurotransmitter. Even though both substances, neurotransmitters and hormones, transmit signals or messages through our bodies, they function rather differently. Whereas neurotransmitters, which are produced in the neurons, transmit electrical signals from one neuron to another across the synapsis, hormones, which are produced in various glands and organs, transmit chemical signals via the bloodstream. Hormones thus easily travel across our whole body, whereas neurotransmitters are bound to the small space between the neurons. Houellebecq's choice to describe serotonin as a hormone underlines how the substance, and thus the drug, affects the entire body and not just the central nervous system.

Even more interesting is his remark that serotonin in all living beings, including amoebas, is mainly manufactured in the intestines and, in line with this, that Captorix is more effective than existing drugs since it directly releases serotonin in the gastrointestinal mucosa. Captorix produces a form of serotonin, which differs from natural serotonin. Existing antidepressants, however, do not produce artificial serotonin. They rather aim at restoring the serotonin balance in the synapsis—the space between the neurons—while inhibiting the reuptake of serotonin in the neuron. Locating the production of both natural and artificial serotonin in the intestinal tract, Houellebecq emphasises the visceral dimension of being depressed. For Houellebecq, we will argue, depression is more about the gut than about the brain.

This shift in attention from brain to gut has also been stressed by Elizabeth Wilson's feminist materialist reading of depression.[19] Mainstream feminist criticism of health problems has been deeply inspired by social-constructivist theories, which are in general 'anti-biologist.'[20] Wilson, by contrast, believes that biology should be given a prominent role in the explanation of depression. Instead of reinstalling the idea of biological matter as passive and receptive, she wants to focus on the active and dynamic role that matter plays. Accounting for matter's agency, it becomes clear that matter or nature is in no way culture or society's other.[21] Wilson claims that in contemporary debates about depression and its treatment, it is believed either that depression is caused by a shortage of serotonin in the brain, or that depression is caused by society. To go beyond this dualistic view, Wilson directs our attention to the role the gut plays in depression and during the consumption of antidepressants. Antidepressants, first of all, are taken orally (and are not injected intravenously); once swallowed, they start their journey through the gastrointestinal tract, through the liver, through the blood circulation, finally reaching the brain while passing the blood–brain barrier.

In addition, since the building block of serotonin—tryptophan—is an essential amino acid (ie, an amino acid that cannot be produced by the body), the production of serotonin is directly tied to diet. Some foods contain more tryptophan than others.[22] Underlining that the production of serotonin takes place within a network that encompasses the entire body, including dietary habits, Wilson rejects the idea of the brain as the alpha and omega of psychic distress. Depression thus involves a bioaffective phenomenon, which concerns the entire body and is part of a larger network of cultural and social habits pertaining to eating and food.[23] Instead of only affecting its 'final target'—the synapses in the brain—antidepressants heavily affect the gut while travelling through it. That is also why gastrointestinal distress, such as nausea, is a common adverse effect of antidepressants. The gut is so sensitive because most of the body's serotonin is stored in the network of nerves in the gut—only five per cent of all the body's serotonin is in the brain.[24]

For Florent-Claude in *Serotonin*, the consumption of Captorix forms part of his morning ritual for satisfying his oral desires, combined with coffee and cigarettes. Food consumption and appetite play an important role in his life. Florent-Claude is able to enjoy food until the last stages of his depression: in fact, besides smoking and watching TV, and alcohol ("Alcohol is very important for the elderly, it's almost all they've got left," p. 152), eating is the only activity from which he still derives a modest pleasure. Every time he visits a restaurant, the narrator digresses into lengthy descriptions of the menu. As we have noted, the production of serotonin largely takes place in the gut, hence it is closely related to dietary choices. Aptly, among the few things the narrator still enjoys is going to a supermarket with an assortment of 14 different kinds of humus—chickpeas containing a lot of tryptophan and thus being famous triggers for serotonin.

DEPRESSION AS EMBODIED 'I CANNOT'

If in Houellebecq's fictional universe, depression is not located in the brain but spread through the gut and hormones affecting the entire body, it is a state that he describes in terms of suspended agency, of being powerless, a process of becoming increasingly incapable and impotent. As the protagonist reports: "I've let myself be swayed back and forth (*laissé balloter*) by events" (p. 11). In hindsight, he never really experienced being in charge of his own life and his choices. Most telling examples of him being a passive bystander instead of an agent, include the break-ups with women he loved: Claire, Kate and Camille. In all cases, he passively leaves it to the other to terminate the relationship on account of his infidelity. He offers no explanation. He is a slave of his desires and hormonal drives, and does not make choices: "Once again I didn't do anything, didn't say anything, and let events run their course" (p. 149).

This incapacity and lack of grip on his life leads to the failure and loss of love in his adult life, one of the foci of Florent-Claude's depression. Such feelings of powerlessness are not restricted to his love life: they govern his whole life. He feels impotent and powerless in his job: he has not been able to change the fate of French farmers. He is saddened to see, in spite of all his efforts, how French agriculture is being crushed in the wheels of the free market economy. Houellebecq does not provide a single

'cause' for Florent-Claude's depression. Instead, he describes the progression of his condition in terms of a progression of feelings of incapability. His depression might be triggered by feelings of apathy and impotence, but at the same time, it amplifies these feelings. He feels that he likes to give in to a 'lethargic inactivity' (p. 87).

A pivotal role is given to Florent-Claude's sexual impotence. At the beginning, it is indicated that impotence is a side effect of the antidepressant Captorix. Yet, he had stopped being sexually active even before he starts taking that drug. He experiences his last sexual eruption during his holiday in Spain, after a brief encounter with a young woman with chestnut hair. He keeps on dreaming that she will "come to save my cock, my being and my soul all at once" (p. 13). When the depression really hits him, he loses his libido completely. Florent-Claude himself does not seem very saddened by his sexual inertia: Doctor Azote, on the other hand, places a lot of emphasis on his impotence.

It might be tempting to interpret Florent-Claude's experiences of impotence in either physiological or psychological terms. For indeed, sexual impotence could be explained either in terms of some defects in his body, or in terms of a loss of psychic willpower. We believe, however, that the incapacity that Houellebecq describes goes beyond this body–mind reasoning and refers to incapacity in an existential sense. To clarify the concept of existential impotence, we draw on theories from the tradition of existential and phenomenological philosophy. According to Heidegger, human existence is characterised by a double-sidedness: on the one hand, we are 'thrown' in a world that we have not chosen ourselves—a world that has already been determined by a linguistic, economic and political situation, and by certain power relations—but on the other hand, we always have the possibility to relate to this facticity.[25] Hence, Heidegger describes human existence in terms of a 'thrown-design.' Sartre, who adapted Heidegger's analysis of human existence into his own branch of existentialism, expands on the idea of being the designer of your own life. According to him, existentialism implies that existence precedes any essence, which means that there is no blueprint of how to live your life.[26] To exist means that you have to shape your own existence while transcending given situations. Human existence thus implies radical freedom, or better, it implies that you are condemned to freedom. This also means that no one but you is responsible for your life. If you hide behind an excuse such as 'I couldn't do anything about it,' then according to Sartre you are in 'bad faith,' denying your own possibilities. Human existence is characterised by a range of possibilities.

His contemporary Merleau-Ponty has criticised Sartre's idea of existence in terms of freedom for being too radical. The main difference between Merleau-Ponty, on the one hand, and Sartre, on the other hand, is that the first defines human existence as being embodied, while the latter does not pay any attention to humans' embodiment. According to Merleau-Ponty, humans are embodied beings, not the sum of a body and a mind. Because of our embodiment, we are always bound to a certain place or environment. However, being embodied does not in any way mean that we would be trapped in our bodies (as Plato believed). It is precisely because of our bodies that we have possibilities. As a critique of Descartes and Kant, Merleau-Ponty argues that human existence is not first and foremost an 'I think,' but an 'I can,'[27] which indicates having possibilities. Merleau-Ponty explains that this 'I can' habitually functions below the level of conscious, wilful actions. When, for instance, I grasp a cup of tea, I do not have to rely on some preceding mental intention. Instead, my arm and hand act while they are invited by the cup that is standing in front of me, my arm stretching towards it and my hand opening up in such a way that cup and hand instantaneously fit together. No thinking or mental act involved here. At the same time, Merleau-Ponty calls these types of movement intentional, since they do not involve unconscious reflex motility. Grasping a cup is not a reflex, it is a way of meaningfully and intentionally relating to one's own environment. The 'I can' thus implies motor intentionality, that is, it is about giving meaning to one's situation while moving one's body. It is because of one's 'I can' that people as embodied beings can transcend their actual situation. When someone is only able to perform concrete movements to respond to their environment (eg, touch one's nose because of a mosquito sting), one's transcendence and 'I can' is weaker than when one is also able to act in manners that are more abstract (eg, touch one's nose on command). In his *Phenomenology of Perception*, Merleau-Ponty describes how illnesses can diminish a person's 'I can.'[28] The decrease of one's 'I can,' however, is not just about localisable defects in the anatomical body (such as the case in infections, neurological defects or bone fractures). One's 'I can' is affected when one's possibilities to meaningfully interact with one's life-world is disrupted.

What Houellebecq's novel shows us is that depression can be seen as an impairment of this 'I can,' which we might call an 'I cannot.' Florent-Claude's story is marked by an embodied 'I cannot,' without there being a single localisable defect in his body. It is also interesting to note that he only sought medical help when he was no longer able to care for himself: get out of bed, wash himself, brush his teeth and comb his hair—the moment he would prefer not to have a body anymore. The fact that he has, and is, a body of which he has to take care becomes unbearable for him: "I would have liked to no longer have a body; I was finding the prospect of having a body, of having to devote care and attention to it, more and more intolerable" (p. 78). Even though there is nothing wrong with his body as 'musculoskeletal system,' he is hardly able to move or perform actions. Near the end of the story, he has become virtually idle. In line with Kevin Aho's phenomenological analysis of depression, we could therefore say that depression marks the very limits of the idea of existence as transcendence.[29] The narratives of severely depressed people—such as Florent-Claude's—show that little is left of the potential for transcendence.

CHAOS NARRATIVE AND TEMPORAL DISLOCATION

What does this lack of embodied possibilities, or embodied 'I cannot' of depression, mean for the possibilities for giving narrative form to such experiences? In order to answer this question, we need to examine more closely the experience of time in depression, and see how this experience is configured in *Serotonin*. In phenomenological philosophy, unlike in diagnostic manuals such as the DSM, the experience of temporality often has a central place when it comes to explaining experiences of depression. In this tradition, to be human is to be a temporal being with a direction, a sense of continuity and a plan for the future. In *General Psychopathology* (1913), philosopher and psychiatrist Karl Jaspers notes that this direction and sense of futurity is precisely what is lacking in the depressed.[30] The patient of depression feels nothing, but is aware of this feeling of nothing, which Jaspers calls a meta-feeling. In the words of German psychiatrist and philosopher Thomas Fuchs, a social and biological desynchronisation occurs in depression. In depression, time is suddenly noticed: it becomes perceptively and painfully out of joint or 'out of synch.' Fuchs describes it as a feeling that

the present is all there is and all that can ever be imagined to be, and that the future is a thing of the past.[31]

Matthew Ratcliffe argues that it is a common mistake to attempt to understand and talk about depressive experience in terms of ordinary intentional states (eg, experiencing intense negative emotions, making certain types of judgements about the world).[32] According to him, depression is not an intentional state or set of intentional states, but rather a shift in, or loss of, the kinds of possibilities that exist for us: particularly, the possibility of meaningful events or projects. According to Mikkel Krause Frantzen, the psychopathology of depression should be understood in temporal terms, in relation to the problem of time, and specifically the problem of futurity. In *Going Nowhere Slow*, he describes it as a 'chronopathology,' marked by a loss of futurity, of the possibility to imagine the future. He views depression as "the (pathological) feeling that history has come to an end, that the future is closed off, frozen once and for all."[33]

This lack of futurity obviously has consequences for story-telling possibilities, when we consider narrative as a cause and effect trajectory with a beginning, middle and end structure. One of the most influential typologies of illness narratives has been created by Arthur Frank. In *The Wounded Storyteller*, Frank describes illness narrative as an attempt to regain a voice.[34] In telling the story of an illness, the ill person claims her body back from medicine and makes sense of the illness, as part of the healing process. Frank calls this a postmodern experience, in that it emphasises the need for a plurality of individual stories. Illness narratives allow for reflection and expression in a process where the individual searches for explanations and understanding of the experience and contextualises it in relation to self and others.

Frank distinguishes three categories of narratives: the restitution narrative, the chaos narrative and the quest narrative. In the restitution narrative, a healthy person first becomes sick and then recovers. The chaos narrative is marked by an absence of this moment of recovery: the protagonist is a victim of bad luck. Chaos narratives are not really 'narratives' at all, as they are incompatible with writing or even telling: "Those who are truly *living* the chaos cannot tell in words… Lived chaos makes reflection, and consequently story-telling, impossible."[35] There is no clear sequence or discernible causality, hence the chaos narrative is really anti-narrative: "chaos is the pit of narrative wreckage."[36] The third type, the *quest* narrative, occurs when the illness initiates a spiritual journey. Quest narratives "meet suffering head on; accept illness and seek to *use* it."[37] In a sense, the chaos narrative is the most realistic depiction of depression, as making a story out of these experiences often happens only in retrospect, by patients in remission. They are asked to "reconfigure their experiences, through the transformative lens of memory, to fit the particular stylistic codes of conventional narrative, journalistic or autobiographical."[38]

Florent-Claude's narration of depression has characteristics of Frank's chaos narrative. We could say this is the most truthful type for a person actually living the depression, as, in Kiki Benzon's words, it is a disease whose 'anarchic disconnections,' 'bifurcation of mood,' and 'murky distractedness' make it incompatible with causal systems and linear teleology.[39] *Serotonin*'s protagonist does not psychoanalyse himself or try to trace back his depression to a point of origin like a childhood trauma. He has had loving and caring parents; he completed higher education in agriculture and enjoyed his life as a student; he has had meaningful relationships, and he has held well-paid positions in agriculture policy. Even though his parents chose to end their lives together after his father was diagnosed with an incurable brain tumour, Florent-Claude does not describe their sudden suicide as a traumatic event. He is, in other words, not prone to looking for causal explanations. Unlike in the quest narrative, marked by the principle of causality, informing the question 'why me?' and the quest to lay bare a chain of events explaining the depression and recovery, Florent-Claude's narration is serial, paratactic and open-ended. He simply mentions one experience after another, without inferring causality or answering the question 'why'?

When we look at the way the narrator experiences his depression, it is fitting to see it as a 'chronopathology,' marked by the increasing impossibility to envision a future. As becomes clear from temporal demarcations as "in that commercially toneless but socially incompressible space which, in Europe, separates lunch from dinner" (p. 22) and "at a time that seemed very long ago, that seemed almost to belong to a previous life; a time that was in fact less than two months ago" (p. 249), he experiences time as out of joint:

> I remembered all the places in my life, I remembered them perfectly, with surgical and pointless precision. My memory of dates was more vague, but dates were unimportant; everything that happened had happened for all eternity, I knew that now, But it was an eternity that was closed and inaccessible. (p. 301)

Being stuck in time, increasingly his choices and the possibility of possibility disappear. This includes bodily actions. When he almost drives his car with him and Yuzu off a cliff, the only thing preventing him is an involuntary movement: "in a convulsive and entirely involuntary movement, I swung violently to the left. It was about time, and the front nearside wheel briefly touched the stony hard shoulder" (p. 19). This kneejerk reflex is not the motor intentionality of the 'I can,' it is not an abstract movement allowing him to transcend the situation, even if he saves two lives that he had himself endangered. Instead of making sense of his predicament by giving it narrative form, Houellebecq presents his protagonist's depression as a progressive incapability, a gradual diminishing of embodied possibilities and of meaningful and intentional relations to his own environment. His movements lack transcendence and are increasingly reduced to the concrete: "There are automatic reflexes for pretty much everything, it seems" (p. 229). His romantic, sexual, social and political possibilities are gone, and all that is left of him is the biological reality of the body of the "ageing animal, [that,] wounded and aware of being fatally injured, seeks a den in which to end his life" (291).

The impossibility to imagine the future also characterises the state of Western neoliberalist societies beyond the protagonist's depression. As in most of his works, including *Elementary Particles* and *Submission*, the author sketches a world in which people have reached the limits of freedom (economically, sexually, and romantically). Too much freedom and too many choices have led to a state of meaninglessness and aimlessness, where the never-ending expansion of personal freedom is the only thing left to desire. A 'gut feeling' that is the affect of Florent Claude depression and that is possibly transmitted to the reader, is therefore also the political gut feeling to which populist politics are often said to appeal.[40]

This impotence to place his life in a larger scheme of meaning translates into an episodic, rather than narrative, organisation of his discourse. We might describe Florent-Claude as an episodic personality, using a concept coined by Galen Strawson. Whereas scholars like Oliver Sacks have written about identity as essentially tied to narrative, and the way we live our lives as a story, psychologist Strawson argues against the universality of this thesis. Instead, he forges a distinction

between 'episodic' and 'diachronic' people. An 'episodic' is a person that conceives of her life as a series of discrete events, and sees herself as different people at the time of each event. Unlike 'diachronics,' people that see their life as a single narrative with their self as the unchanging protagonist, "[e]pisodics are likely to have no particular tendency to see their life in Narrative terms."[41] They do not experience this continuity of a subjectivity that was there in the past, is still the same person in the present and will be there in the future. This fits well with experiences of depression, which, as argued, are marked by a problematic relation to futurity. Angela Woods has used Strawson's theory of episodic personalities to nuance and complement the role of narrative in medical humanities.[42] Sara Wasson has made a comparable point about experiences of chronic illness, which, she writes, is experienced in temporal terms as an insisting present, and therefore requires reading practices that are less concerned with narrative coherence and more with fragments and episodes.[43]

An episodic experience of time is on a par with Frank's chaos narrative, which is typically expressed in a syntactic structure of 'and then and then and then,' a staccato pacing of words.[44] The "untellable silence" in such utterances, which are akin to expressions of trauma, "alternates with the insistent" and then "repetitions."[45] The chaos story, which as said is not a story at all, presents "time without sequence, telling without mediation, and speaking about oneself without being fully able to reflect on oneself."[46] It knows no "memorable past," nor a "future worth anticipating," only an "incessant present."[47] As such, the episodic and recurrent nature of depression goes against what Brenda Dyer has called the comic storyline, which she borrows from Northrop Frye's *Anatomy of Criticism* (1957), and which corresponds to Frank's restitution narrative. This narrative, she argues, has served the interests of psychiatry and the pharmaceutical industry and perpetuates North American values of "optimism and individual heroism."[48] Given the prevalence of 'resilience' as a core ideal in neoliberal societies, this suggests, there might be sociopolitical reasons for privileging the episodic over the restitution narrative. Depression is cyclical, it often recurs in 'episodes,' and it does not always have a definitive conclusion or end.[49] The novel has an open ending, leaving the protagonist's fate suspended as he is paralysed and unable to takes his life and death into his own hands.

Florent-Claude watches from the sideline. This being extraneous to his own story is noticeable in a spatial—as he lives in impersonal hotel rooms and spies on his ex-lover from a distance—as well as a temporal sense: "I now had a sense that I was missing something of the reality of the world, that I was withdrawing from history" (p. 173). As is to be expected, his status as spatiotemporal outsider deeply informs his autodiegetic narration of the novel. The narrator has no power, will or energy to really tell a story with a strong sense of narrative direction, and as a result, the text has an aimless, meandering quality.

Houellebecq makes use of anti-cathartic devices: he dilates the narrative duration of Florent-Claude's anticipations of, and preparations for, possible occurrences in the future. Examples include a sexual encounter with a young female tourist with chestnut hair he meets on the road in Alméria, the aforementioned murder of Camille's son (he has a gun, positions himself at the ideal spot, even engages in detailed speculation on how the media will respond, and considers how to erase his DNA), and even his own suicide: "height, h, travelled by a body in free fall for a time, t, was in fact given precisely by the formula $h=1/2gt^2$, with g being the gravitational constant, giving a falling time, for height h, of $\sqrt{2}\,h/g$" (p. 304). In all these cases, duration of the narrative discourse slows down to build anticipation in the reader, who then, like the protagonist himself, ends up being disappointed by his lack of agency. If affects of frustration and oppression gradually build up in the reader, these are reinforced by such instances of anti-catharsis, which make sure we have no outlet, are not 'purged' of the depressive gut feeling. Unlike Greek tragedy, *Serotonin* offers no relief.

Thus, the temporal structure adds to a reading experience of a gradual blurring of temporal consciousness that is characteristic of his depression. This experience is presented as a lack of a future, as well as increasingly standing outside of time and existence. For the reader, this is disorienting. Florent-Claude is overgrown by the past, whose images keep painfully impinging on him: "memories came back in a steady flow, it isn't the future but the past that kills you, that comes back to torment and undermine you, and effectively ends up killing you" (p. 245). All he does near the end of the story is making a selection of about thousand photographs from his computer to decorate the wall of his apartment (a "Facebook wall that would never be seen by anyone but me," p. 300). It is a task that is "physically within [his] range" (p. 301), *une tâche physiquement à ma portée*. At this final point, his 'I can' is limited to what is at his fingertips. His past is quite literally overwriting his present and forming a cage in which he lives out his last days of embodied powerlessness. He allows the past to take over his present, as if he wishes to inhabit his own past like the room he lives in. It is a powerful image for the desynchronisation between self and world, the fall from the future to the present. This anti-narrative manner of presentation of experiences of depression also has an affective dimension that we discuss in the last section of this article.

Affective transference

Here, we consider how these disorienting narrative structures and certain thematic choices possibly affect the reading, by transmitting affects like disgust and dizziness. Because of Houellebecq's choice to present a chaos narrative that orders events and memories in an anti-narrative, paratactic and episodic manner, an important stylistic affect of his discourse is the feeling of exhaustion at having said it all before, of having to repeat oneself over and over again. Critics have picked up on this sense of exhaustion—"the new Michel Houellebecq novel, *Serotonin*, is an exhausted and exhausting book"[50]—but unfairly attribute this to a writerly defect ("It makes you wonder if he has played out his string as a fiction writer"[51]). We argue that this affect is precisely intended to transmit the 'gut feelings' of depression to the reader. As we see it, *Serotonin* not only provides a picture of depression as an embodied condition, but Houellebecq's way of writing can generate visceral responses in the reader. Affective transference goes hand in hand with the picture of depression as an embodied phenomenon.

Foregrounding hormonal imbalances and the modification and satisfaction of oral desires, and in line with Wilson's claim that depression is an affliction of the 'bioaffective system',[52] Houellebecq emphasises the gut feelings involved in depression as a bioaffective phenomenon. Claire Lozier uses the notion of affect for her reading of Houellebecq's *Platform* (2001).[53] She argues that Houellebecq produces '*signes empuissantisés*'[54] or 'empowerised signs,' ideas that have been equipped with 'an emotional prosthesis' (p. 170). Frantzen aptly describes Houellebecq's oeuvre as a symptomatology or 'symptomatic discourse' of depression, in that it evokes affects like 'medicalized numbness' beyond both happiness and unhappiness, hope or despair, and the aforementioned lack of desire or expectations.[55] As Kinnunen and Kolehmainen write,

affect calls into question the boundaries between mind and body and between various bodies, and it can refer to bodily sensations, feelings and emotions as well as to non-conscious, incorporeal, trans-subjective and inter-corporeal sensations.[56] It is especially in these latter characteristics, as trans-subjective and inter-corporeal, that affect has a relational dimension. According to the philosopher Bernard Stiegler, "Speaking about misery always entails exposing oneself to the risk of becoming miserable."[57] It is therefore only possible to speak of that which affects the depressed to the extent that you find yourself affected.

The narrator of *Serotonin* repeatedly refers to the shortcomings of language to express the essential: "the vocation of the word is not to create love but to engender division and hatred, the word separates as it produces" (p. 82) and "I would've liked to say something, find a phrase that expressed my gratitude and imagination; I searched frantically for something during the thirty seconds that it took me to put on my coat and walk through the door; but yet again words failed me" (p. 284). He has lost faith in communication and the ability to form meaningful human connections. After his diagnosis and his prescription for Captorix, Florent-Claude does not seem to identify with his predicament, or care about the label put on it. The word 'depression' only occurs twice in the novel, both times vocalised by doctor Azote. Nor is he plagued by extreme or even outspoken emotions. His depressive mood is described as "a peaceful, stable sadness, not susceptible to increase or decrease; a sadness, in short, that to all intents and purposes appeared definitive" (p. 78).

The focus on affect makes it possible to overcome the issue of how experiences of depression can be put into words in such a way that others can empathise with the depressed person. Affect can be transmitted by literary language through 'embodied simulation,' the imagination of particulars beyond direct perception and memory. The reader becomes affected by and entangled in the material. In our analysis, we identified the following affective dimensions: appetite, disgust and nausea, and feelings of spatial and temporal disorientation. An almost obsessive consumption of food is a theme that runs throughout Houellebecq's oeuvre. Often, he presents appetite as a substitute for the libido in Western culture. *Serotonin* brings the tropes of sexual and gastronomic desire together again: one young Dutch woman, in Florent-Claude's eyes, looks "like an advertisement for Gouda" (p. 82).

Watching TV constantly, he notices that culinary shows rapidly multiply, leading the West into a regression to "the oral stage" (p. 286). He understands that he himself will undergo a similar regression. When his libido has completely evaporated because of the antidepressant, he makes it a mission to empty his bank account by eating it up and eating himself to death: "to try and cultivate an interest in expensive and refined foods (Alba truffles? Maine lobsters?). I had just passed eighty kilos" (p. 306). Because of his increased cortisol level, it is inevitable that he will eat more and steadily gain weight. Having lost interest in sports programmes on TV, he spends his time watching cooking shows, becoming a "really old fat man" (p. 295). As the novel's end nears, Florent-Claude finally loses interest in the culinary shows. His loss of appetite marks "the real start of [his] decline" (p. 296). Having invaded his entire body through gut and hormones, the depression has successively extinguished his sexual desires, his *joie de vivre,* and will eventually lead to his death, so he seems to suggest, when his oral desires extinguish as well. The protagonist's omnivorous appetite gradually takes up more thematic space, as all his other interests evaporate. His descriptions of menus and wines become more elaborate and detailed, for instance, when he is meeting his ex-girlfriend Claire after many years, who turns out to be as unhappy as he is, and an alcoholic. Their dinner turns into an all-night drinking and eating binge that is continued with breakfast and booze the next morning. Descriptions of Florent-Claude's appetite transmit the quite contrary affect of nausea to the reader, as here it becomes painfully clear that we witness a character trying to eat and drink himself to death.

Even though gastrointestinal distress, or nausea, is mentioned as a common side effect of Captorix, Florent-Claude himself remains exempt from it. Where he enjoys a healthy appetite for most of the novel, it is the reader who is saddled with disgust and nausea, the most important affects here. Besides these lengthy scenes of eating and drinking, disgust and nausea are transmitted by long passages relating how the narrator's girlfriend was taped having sex with dogs, how he witnesses a neighbour paedophile who is filming his naked 10-year-old victim, how he recalls a viewing of an art film depicting naked Japanese girls performing all kinds of acts with eels, octopuses, cockroaches and earworms. "In one video a Japanese girl caught the tentacles of an octopus coming out of the toilet bowl with her teeth. I don't think I've ever seen anything so disgusting" (p. 39). Or how his doctor recommends the healing powers of "two little sixteen-year-old Thai hookers" (p. 135).

It is important to note that Florent-Claude is by no means *morally* outraged or even disgusted in any of these situations. His numbness of feeling translates itself to an alienating sense of neutrality. Watching his girlfriend engaged in a "canine mini-gangbang" (p. 42), he thinks it is disgusting, but mostly for the dogs. Watching the paedophile, he starts feeling "sick to [his] stomach after a while, "not because of the content but because of the filming; he must have crouched down to get her in a low-angle shot, he must have been hopping around her like an old toad" (p. 188). Watching the woman with the squid screened in an arts centre, he has to vomit but mostly reflects on his tendency to throw himself at the banquet on first chance, and that he should have waited until after the viewing. Besides these occasions where the narrator acts as a morally stoic, though bodily affected viewer, and transmits affects of disgust and nausea to the reader, there are also numerous plastic descriptions of possible ways to commit suicide or murder, which are literally 'hard to stomach.' In all these cases, the affect transmitted to the reader is not exactly the same affect the protagonist undergoes—by way of his stoicism, he evokes gut feelings of disgust.

A third and last affect we single out here are feelings of disorientation and (spatiotemporal) confusion, closely related to the narrative and temporal dislocation discussed in the previous section. Here, we discuss them in terms of possible disorienting effects on the reader. Houellebecq renders Florent-Claude's stream of consciousness in extremely long, digressive sentences, often consisting of multiple juxtapositions that build to an absurd, unexpected (anti-)climax. The narrator's thoughts are incoherent and subject to abrupt shifts.[58] Commas are used instead of periods. Run-on sentences like these can be described in terms of what Sianne Ngai fittingly calls 'agglutination': "the mass adhesion or coagulation of signifying units."[59] These are held together by a fairly simple syntax or organising principle, in this case separated by commas. Such sentences convey cognitive swings, fractures and flows of thought that befit the "cognitive mechanics of depression itself, whose salient feature is impaired concentration, a tendency to shift erratically among logical strands and the contours of myriad emotional states."[60] The effect of such 'agglutination' is dizziness, a sense of overload and lack of orientation that is related to the temporal dislocation of the narrative structure, but that here produces affects of vertigo.

CONCLUSION

By giving his novel the title *Serotonin*, Houellebecq puts the reader somewhat on the wrong track. After all, it is often claimed that people who suffer from depression have a shortage of serotonin in their brains, because of which depression is readily regarded as a brain disease. However, as we have seen, the story of Florent Claude shows that depression is rather a disruption of one's embodied 'I can' that affects one's entire existence. That Houellebecq has chosen the title *Serotonin* for his novel is not because he supports the widespread 'chemical imbalance in the brain' hypothesis. When the chemical serotonin has a specific value in this novel is because Houellebecq describes it as a kind of 'social' hormone, while claiming that it is "linked to self-esteem, to the sense of recognition obtained within a group" (p. 94). Serotonin, then, can be seen as some sort of 'social glue,' and it is particularly this social glue that seems to be lacking in Houellebecq's universe of lonely, liberal individuals. Leaving aside what exactly causes depression (and serotonin deficiency), we can say that depression manifests itself in this novel both as a lack of social cohesion and as a disruption of individual existential possibilities. The decline of social cohesion is thus by no means compensated by wilful and self-governing individuals. Social disintegration is reinforced by the decrease of embodied possibilities by means of which the depressive person is cut-off from her or his world. Depression, then, transforms people into 'disconnected' individuals. Since the experience of disconnectedness fractures lines of communication, the depression 'illness narrative,' which aims at sharing illness experiences, is only possible as a chaos story, an anti-narrative. Narrative, after all, presupposes shared communal frameworks of meaning making. In Houellebecq's universe, these are no longer available.

We argued that this lack of embodied possibilities, or the embodied 'I cannot,' has consequences for the possibilities of giving narrative form to experiences of depression. Focusing on experiences of time in phenomenological accounts, we characterises depression in Houellebecq as a chronopathology: stuck in time, the narrator suffers from an incapacity to envision a future. The chaos narrative is an apt form for this, as it precludes closure or recovery. Houellebecq's chaos narrative is in fact not really a narrative at all, as there is no clear sequence or discernible causality. Florent-Claude's discourse is episodic, paratactic and open-ended. He never asks himself why this is happening to him. His position as a spatial and temporal outsider informs the narration: lacking the power, will or energy to tell a story with a sense of direction, he creates an aimless, meandering discourse fraught with anti-cathartic devices that announce, but do not deliver action. The desynchronisation between himself and the world, finally, does not leave the reader unaltered. The disorienting narrative structures affect our reading, by transmitting affects like disgust, dizziness and nausea.

Moving beyond the mind/body dualism prevalent in writing about depression, and resisting the tendency to talk about brain chemistry as a way of explaining our mental and emotional life, Houellebecq's affective transmission of gut feelings intimates that conditions of existential crisis cannot be treated medically because they are a crisis of narrative, of time and meaning: "nothing had given me the feeling that I had a place to live, a context, let alone a reason" (p. 306). As such, Houellebecq's 'anti-narrative' forms an important contribution to the pathography of depression since it succeeds in passing on to the reader the experience of incapacity, impotence, a debilitating gut feeling and a gradual loss of grip that manifests itself as a temporal and spatial disorientation.

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